

# CITY OF ALBUQUERQUE



January 19, 2012

Richard J. Berry, Mayor

Ms. Darlene Whitten-Hill  
Water Enforcement Branch (6EN-WC)  
EPA, Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

**Re: Administrative Order, Docket Number: CWA-06-2011-1901  
NPDES MS4 Permit Number: NMS000101**

Dear Ms. Whitten-Hill,

The City of Albuquerque (COA) is in receipt of the above referenced Administrative Order (AO). An initial response letter, dated December 16, 2011, provided a general response. As discussed in that letter, the COA has worked diligently with our three partners since the promulgation of the 2003 permit to improve the quality of stormwater runoff and states that it has complied with the existing Stormwater Management Plan (SWMP) and permit provisions. This letter supplies a more detailed response to each of the Findings and Orders cited in the AO as listed in the following paragraphs. This letter will address the Findings numbers 8 through 16 first and then respond to the Order.

## ***Response to Findings***

EPA Finding 8: *Part II of the permit requires the development, revision and implementation of a comprehensive SWMP including pollution prevention measures, treatment or authority and other appropriate means to control the quality of storm water discharged from the MS4. Although Respondent created a comprehensive SWMP, Respondent failed to develop, revise and implement it to determine its effectiveness and performance in reducing pollutants discharged in storm water. The comprehensive SWMP must address: 1) Structural Controls and Storm Water Collection System Operations; 2) Areas of New Development and Significant Re-Development; 3) Roadways, Flood Control Projects; 4) Pesticide, Herbicide, and Fertilizer Applications; 5) Illicit Discharges and Improper Disposal; 6) Spill Prevention and Response; 7) Industrial and High Risk Runoff; 8) Construction Site Runoff; 9) Public Education and Public Involvement; 10) Monitoring; 11) Post Construction Runoff Control and Pollution Prevention; and 12) Good Housekeeping for Municipal Operations.*

COA Response to Finding 8: As it will be stated in the response to EPA Order G, COA has developed, revised and implemented a comprehensive SWMP that addresses the 12 areas listed above. The effectiveness and performance of the BMPs implemented in the SWMP have been assessed through an intensive water quality monitoring and testing program as outlined in Table III.B, Activities 9 and 11 of the 2003 MS4 permit.

In accordance with Item 9.0 Table III.B of the 2003 Permit, the COA has developed "a monitoring program...to assess BMP effectiveness and compliance with the Fecal Coliform TMDL at the North Diversion Floodway Channel, San Jose Drain, South Diversion Channel, and Tijeras Arroyo". Annual TMDL Reports were sent to EPA Region 6 each year on December 1 per 2003 permit requirements from 2004 to present. The BMPs in the Albuquerque Metropolitan MS4 area are considered to be effective because fecal coliform loads were at least 50% lower (and generally, orders of magnitude lower) than target values set by the NMED at the outfall locations.

Item 11.0 from Table III.B of the Permit requires the COA to "submit BMP evaluations and assessment and revisions to the programs above if necessary based on the monitoring data obtained". In accordance with that requirement, the COA submitted a draft BMP Assessment report to EPA Region 6 on November 27, 2007 that indicated BMP effectiveness in meeting TMDL goals. The COA also submitted a report to EPA on November 12, 2009 that provided event mean concentrations and loads for the chemical constituents in Table V.A.1.a of the Permit. Because the event mean concentrations and loads were generally lower than those in the NPDES Permit NMS000101 Fact Sheet that accompanied the 2003 permit (pages 10 and 11 of the Fact Sheet), the existing BMPs are considered effective.

The COA continues to add BMPs or improve existing BMPS in all of the 12 program areas listed in Finding 8 in an effort to reduce pollutants into the MS4 system. Details on program activities are summarized in the Annual Reports provided to EPA Region 6.

EPA Finding 9: *Part II of the permit requires that each permittee shall update, as necessary, or as required the SWMP to ensure compliance with the statutory requirements of Section 402(p)(3)(B) of the Act. The SWMP had not been revised to include the activities of the Water Utility Authority which handles issues with sanitary systems within the MS4.*

COA Response to Finding 9: The COA sent a letter to Ms. Maria Okpala on November 10, 2004 that discussed the merger of the COA Public Works Department (PWD) and role of the Department of Municipal Development (DMD) as NMS000101 permit holder (acknowledged by Willie Lane on memo dated December 2, 2004). Although not discussed in the letter, COA's PWD was merged into DMD because of the State Legislative formation of the Albuquerque

Bernalillo County Water Utility Authority (WUA). The COA acknowledges that it should have better clarified the roles and responsibilities of the various entities involved. The text in the SWMP will be revised to reflect the current COA departmental names and duties as well as those of the WUA. The "revised procedures" sent to EPA on May 27, 2005 will also be re-worded to clarify WUA's ownership of, and responsibility for, the sanitary sewer system. It should be noted that none of the entity responsibilities changed. Therefore, compliance with the permit was not compromised. No reductions in stormwater quality resulted from this State Legislative Mandate. In addition, the WUA's sanitary sewer system continues to be separately covered under an NPDES permit (Number NM0022250). City staff continues to successfully coordinate with staff of the WUA.

EPA Finding 10: *Part II.A.2 of the permit requires a comprehensive master planning process (or its equivalent) to develop, implement, and enforce controls to minimize the discharge of pollutants from areas of new development and significant redevelopment after construction is completed. Although Respondent stated the program had minimized the amount of dirt and contaminants attached to dirt, there was no effective mechanism to measure this claim. Respondent failed to 1) conduct storm water inspections; 2) establish an enforcement process to enforce against non-compliant operators; and 3) establish a method to quantify effectiveness of structural controls. Respondent indicated that it does not have enough staff to effectively administer a comprehensive SWMP.*

COA Response to Finding 10: The COA states that it does have a master plan to deal with development and re-development as shown in our SWMP (11/2/2006) on pages 3 and 4 of 137. The City's development process includes a Development Review Board and a Design Review Committee (DRC). During the DRC reviews, all hydrology and hydraulic aspects of the design are considered. Since 2011, low-impact development aspects of the design are discussed with a standard of accommodating the first 0.44 inches of runoff as the LID volume. This is being done informally awaiting adoption of a new Storm Drainage Ordinance and revisions to the City's Development Process Manual.

Storm water inspections are not required by our SWMP or our MS4 permit. The permit only states that we limit "increases in the discharge of pollutants in storm water as a result of development, and [reduce] the discharge of pollutants in storm water." The annual water quality monitoring program since 2004 has not shown appreciable increases in any of the measured pollutants. And, this has occurred in a time when development was on an increase (2004 – 2007) before the economy reduced development activities. The ongoing Water Quality Monitoring shows that the COA has met the requirements of our SWMP and permit.

The COA acknowledges that it does not currently have a process to enforce against non-compliant operators. However, the COA has not recorded any

instance of non-compliant operators. The COA's primary means of discovering a potential issue is through the Citizen Contact Center or the "dial 311" system. The 311 system allows each of our citizens to quickly report potential problems. When 311 complaints come into Stormwater Management Section (SMS) of the Engineering Division, they are investigated within a few days with most inspected within one day. If there is a problem at a job site, the responsible parties are notified and compliance is obtained. These 311 calls and inspections are documented and reported to the EPA in our annual reports.

Since 2009, the COA has been involved in a process to draft a Storm Water Quality Ordinance and has developed multiple drafts. The DMD administration will work with the City Council to adopt a new ordinance.

EPA Finding 11: *Part II.A.C of the permit requires that public streets, roads and highways shall be operated and maintained in a manner to minimize the discharge of pollutants. Due to a lack of cooperation and communication between the various city departments, there has been little success in measuring and characterizing the makeup of pollutants on public streets, roads, and highways.*

COA Response to Finding 11: Part II.A.3 of the permit states "Roadways: Public streets, roads, and highways shall be operated and maintained in a manner to minimize discharge of pollutants, including those pollutants related to deicing or sanding activities." There is no mention in this section of our MS4 permit of the requirement to characterize the makeup of pollutants as stated in the Finding. Section 2.1.3 of our SWMP lays out an extensive program regarding deicing activities, street sweeping, vegetation maintenance and roadway debris control. Our annual reports include the quantities of material removed from the streets. Deicing has been minimized to the maximum extent practicable consistent with public safety.

The COA has a rigorous and continuing program that meets the permit requirement "to minimize discharge of pollutants" as stated in Part II.A.3 and disagrees with the Finding that there is a lack of communication between the various City departments. The Street Maintenance Division and the SMS are both managed by the Department of Municipal Development. We work together in the Department of Municipal Development to coordinate the activities required under this section of the MS4 permit.

EPA Finding 12: *Part II.A.4 of the permit requires that impacts on receiving water quality shall be assessed for all flood management projects; however, no effective method had been established to evaluate these SWMP requirements.*

COA Response to Finding 12: As described in the SWMP, the COA evaluates each flood management project for the potential for pollutant removal as part of the design and review process. Criteria and procedures for assessing the

feasibility of adding stormwater quality features to new or existing flood control facilities are detailed in the SWMP. Using these criteria, the COA and AMAFCA have implemented numerous, innovative structural designs for the improvement of storm water quality, which include:

- Installation of debris control facilities on principal; spillways of new and existing flood control structures.
- Installation of low-flow debris control facilities and the treatment of first-flush storm water runoff.
- Retrofitting of existing debris control facilities to remove a higher percentage of floating debris.

Per permit requirements, the Albuquerque MS4 Co-Permittees and Bernalillo County contracted an engineering study to evaluate the sources and BMP alternatives to control gross pollutants, including floatables, in the Albuquerque Metro Area. Results of this study, completed in 2004, are being used to prioritize target areas for gross pollutant control BMPs. A \$400,000 design and construction project will install ported risers on 4 to 5 of the City's detention ponds to aid in the control of floatables.

EPA Finding 13: *Part II.A.5 of the permit requires that each permittee shall implement controls to reduce discharge of pollutants related to the storage and application of pesticides, herbicides, and fertilizers (PHFs) applied by the permittee's employees or contractors to public right of ways, parks, and other municipal property. Due to lack of cooperation and communication between the various city departments that utilize PHFs, there is no effective method established by respondent to evaluate the Best Management Practices (BMPs) implemented for PHFs.*

COA Response to Finding 13: Per permit requirements, COA sent in a copy of the revisions to the PHF program on November 30, 2004. The revisions became section 2.1.6 of the COA's SWMP. A certification letter was sent to EPA Region 6 on November 29, 2005 stating that the PHF program as outlined in section 2.1.6 of the SWMP had been implemented and will continue for the life of the MS4 permit. The activities discussed in section 2.1.6 meet the requirements of Part II.A.5 and Table III.A of the 2003 permit.

In addition, as discussed in the response to Finding 8, the COA has assessed BMP performance through its monitoring program. The report dated November 12, 2009 contains Event Mean Concentrations and Loading Data. The Event Mean Concentrations are comparable to those in the 2003 Fact Sheet. The loads indicative of fertilizer related pollutants (Total N, TKN, Total P, and dissolved P) are comparable to or less than those in the 2003 Fact Sheet, indicating a reduction in these pollutants and adequate BMP performance.

Finally, the COA conducted training for heads of City departments in the Fall of 2010. Training on the use of PHFs occurred on October 12, 2010. The COA SMS is obtaining procedures regarding PHF use in other departments (Parks & Recreation including Open Space, Solid Waste, and Aviation). These departments are apprised of New Mexico Department of Agriculture (NMDA) regulations for the storage and application of PHFs as well as training of applicators. COA SMS personnel will continue to work with other departments to insure that all regulations and requirements are met. As discussed in the SWMP, many departments, such as Parks and Recreation, and Open Space, are striving to reduce PHF use through native plantings.

EPA Finding 14: *Part II.A.8.a of the permit requires that priorities and procedures for inspections, monitoring and establishing and implementing control measures for discharges from Industrial & High Risk Runoff be established. Respondent owns or operates an airport, two transportation yards, one maintenance facility, and one solid waste facility. There are currently no mechanisms in place to determine if those facilities are in compliance with the Act and permit.*

COA Response to Finding 14: The Sunport and Double Eagle airports have filed and are under separate regulations as a Multi-Sector General permit and make annual reports. The City evaluated our Fleet Operations (two different transportation yards) and Pino Yards (maintenance facility) and determined that it did not meet the definition of Industrial and High Risk. The SMS held Good Housekeeping meetings with all twelve City departments in 2010 and most departments now have SWPPPs for their on-going operations. Starting with 2012, each department will be contributing annual reports on their storm water quality activities.

The COA sent out letters to business owners according to their Standard Industrial Codes regarding the requirements of the EPA for business to obtain a Multi-Sector General Permit prior to issuance of the 2003 permit and again in 2011. Per the SWMP, the SMS conducts on site inspections upon receipt of a discharge complaint. In addition, the Albuquerque Fire Department has an inspection program for facilities subject to EPCRA Title III, Section 313 and businesses utilizing hazardous materials. A list of all the facilities that collect, temporary store and handle hazardous materials is included in Section C of the SWMP.

EPA Finding 15: *Part II.A.9.b of the permit requires the development of a program to reduce the discharge of pollutants from construction sites. The program should include scheduled inspections of construction sites and the enforcement of control measure violations. Respondent has no dedicated storm water inspectors to conduct inspections and has not designed a formal enforcement escalation procedure for the storm water program.*

COA Response to Finding 15: Section Part II.A.9.b of the 2003 permit requires the "inspection of construction sites and enforcement of control measures (in accordance with priorities and procedures established in the Storm Water Management Program)." The City inspects its own Capital Improvement construction sites and the development process requires SWPPP's for regulated development. Failure to comply with SWPPP requirements can be a basis for stopping work. This section does not mention nor require "scheduled inspections", "dedicated storm water inspectors", or "enforcement escalation". The SWMP does describe procedures for conduction of inspections and enforcement control measures.

A review of several of the Albuquerque Area MS4 permit programs was conducted by EPA Region 6 on February 26, 2007 through March 1, 2007 which included the construction program. The Audit Team determined "that the permittees' program was administratively and technically sound" although there were recommendations for improvement. At that time, the EPA recommended that the COA re-submit the revised construction runoff program. This paperwork was included in the 2007 Annual Report submitted to EPA on February 1, 2008.

EPA Finding 16: *In accordance with 40 C.F.R. § 122.26(d)(2)(v), there should be an assessment of program controls expected as the result of the SWMP requirements. Respondent has no mechanisms to effectively evaluate controls used to reduce pollutants from discharges of the municipal storm sewer constituents from the MS4.*

COA Response to Finding 16: The COA recognizes that the basis of our MS4 permit is 40 C.F.R. section 122 et al. However, our relationship with the EPA has been through the SWMP and the MS4 permit issued by the EPA effective on December 1, 2003. The COA again states that our annual water quality monitoring program constitutes the effective evaluation of our current controls as stated in our SWMP. As reported in each annual report since 2004 and the Draft BMP Assessment submitted on November 27, 2007, the data indicates that the COA has stormwater controls which meet the requirement of Maximum Extent Practicable.

The COA has requested that the USGS evaluate all our data from storm water discharges and to present the COA and EPA with their analysis of the results. The USGS was contracted in 2009 to perform this work and it has not yet been completed. Once complete, the COA will be able to demonstrate to the EPA that our discharges show no significant challenges and that constituents are not increasing over time. We look forward to sharing this data with EPA.

In summary, the COA feels that it has complied with the provisions of our SWMP and 2003 permit to the Maximum Extent Practicable. After receiving a favorable review of many programs by the EPA in February/March 2007, we continued them to this day. The COA disagrees with many of the Findings in this AO and

wonders how the EPA's opinion of our program has so dramatically changed in just four years without any intervening, written notification of potential violations. Nonetheless, the COA will revise portions of its SWMP as stated in this letter. We look forward to working with the EPA and our MS4 partners in our continuing goal to improve the quality of stormwater runoff to the Rio Grande.

### ***Response to Orders***

**EPA Order Item A:** *Describe, develop and implement Measurable Goals for evaluating the effectiveness and performance of BMPs developed and implemented for each SWMP to reduce pollutants in storm water that may discharge into the MS4.*

**COA Action Item A:**

The COA reviewed the major BMP sections of the COA SWMP, dated October 2004, and developed Measurable Goals for evaluating the effectiveness and performance of each BMP section of the SWMP. These goals not only include the analysis of the intensive water quality measurement program historically conducted by the COA, but also include the additional review and analyses of stormwater management actions taken by the major departments of COA government, the WUA, the NMED, and the multi-agency Mid Rio Grande Stormwater Quality Team.

**EPA Order Item B:** *Develop and implement enforcement strategies to address industrial violations of the permit within five (5) days of the occurrence of the violation(s).*

**COA Action Item B:**

The COA has reviewed and clarified its current policies and procedures to address industrial stormwater discharge violations of the MS4 permit. These procedures have been clarified in the SWMP in a clear, step-by-step process which emphasizes not only the investigation and correction of the violation, but also clarifies the record keeping procedures necessary to provide an accurate record of the COA actions taken to correct the violation.

**EPA Order Item C:** *Update, as necessary, changes to the components of the SWMP to reflect current implementation and/or maintenance of BMPs and any changes in procedures for each component of the SWMP.*

**COA Action Item C:**

The COA provided updates to the EPA as scheduled in the 2003 permit. In addition to the updates, changes were also detailed in the Annual Reports as specified in the permit. The COA has reviewed the current SWMP for necessary updates necessary to clarify responsibilities for the implementation of SWMP components, especially those previously administered by the now non-existent



Water & Sewer Division of the COA Public Works Department. The current SWMP will be updated to reflect the activities performed by SMS of the DMD as well as those performed by the WUA.

**EPA Order Item D:** *Revise the SWMP to include all city sections, departments, and divisions involved in implementation of the SWMP. These sections, departments and divisions shall provide data to be included in the Annual Report as required by the Act, applicable EPA regulations, and the permit.*

**COA Action Item D:**

The Measurable Goals developed by the COA in Order Action Item A, discussed above, include the review and analysis of actions taken by COA departments involved in the implementation of the SWMP. These actions have continually been reported to the EPA in its annual MS4 reports. However, the internal reporting process by departments will be updated and better coordinated to reflect a united effort by all to achieve the stormwater management goals outlined in the current SWMP.

**EPA Order Item E.** *Part II.G.3 of the Permit authorizes the EPA to require changes to the comprehensive SWMP, as needed, to include conditions deemed necessary to comply with the goals and requirements of the Act. Respondent is also ordered to develop and implement a database related to the implementation of a comprehensive SWMP for documenting information such as 1) scheduled inspections, 2) spill responses, 3) public education events and posted event responses, 4) measurable goal accomplishments, and 5) training for employees and the regulated community.*

**COA Action Item E:**

The COA has reviewed its current databases, used for the preparation of the annual MS4 report sent to the EPA, which historically have captured and recorded:

- Training for both COA employees and the public
- Public education events
- Complaints
- Spill Responses and Enforcements
- Construction activities (Municipal and private)
- Monitoring results

The COA SMS will continue to update its existing databases and will work with other departments to insure proper documentation and tracking of items required for permit compliance. The COA Construction Services Division (CSD) has recently updated its database to include SWPPP documentation. The SMS is

currently meeting with the Parks & Recreation Department to better document its use of pesticides, herbicides, and fertilizers and training of applicators.

**EPA Order Item F:** *Respondent shall comply with the EPA requirements and standards set forth in the permit, Act, and applicable EPA regulations.*

**COA Action Item F:**

The COA is proud of its accomplishments under the 2003-2008 administratively extended MS4 permit. The COA has complied with the existing requirements and standards set forth in the permit and applicable regulations to the Maximum Extent Practicable. The COA is committed to work with our MS4 partners and the EPA to continually improve the quality of stormwater discharges to the Rio Grande.

**EPA Order Item G:** *Within ninety days (90) of receipt of this Order, Respondent shall provide written certification to EPA, Region 6, that all BMPs, designed to correct deficiencies and prevent future occurrences of the violations cited herein, have been implemented, and that any and all other violations, contained in this Order have been rectified and compliance obtained.*

**COA Action Item G:**

Page 1 of the EPA Administrative Order, dated October 25, 2011, states that the violations found in the MS4 Audit of September 22, 2009 consist of:

- a) *Failure to develop and implement an effective Storm Water Management Program (SWMP)*
- b) *Failure to develop and implement Measurable Goals to assess the effectiveness and performance of the Best Management Practices implemented for each element of the SWMP to reduce pollutants in storm water that discharges into the MS4; and*
- c) *Failure to update the SWMPs to reflect the current operation of each implemented SWMP.*

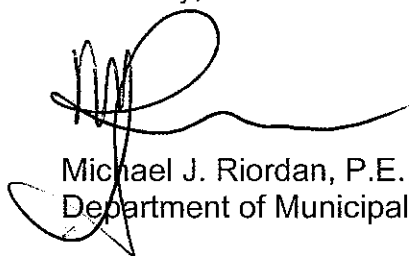
The COA has developed and implemented an effective SWMP and Measurable Goals to assess the effectiveness and performance of the BMPs described in the SWMP. Under a Phase 1 MS4 permit, targeted BMP effectiveness is justified by intensive water quality testing. Therefore, the 2003 permit issued to the COA and its partners specifically stated that the effectiveness of the implemented BMPs would be indicated by the **results of the water quality monitoring and testing program** outlined in Table III.B, Activity 9,11 of the MS4 permit.

As discussed in the initial response, the COA and its three co-permittees have spent over \$3 million in the implementation of a state of the art stormwater monitoring program that is conducted by highly trained water quality professionals of the United States Geological Survey (USGS). This monitoring program has shown compliance with the TMDL goals as calculated in the

approved methodology of the 2003 permit. In addition, monitoring has shown no indication of excessive heavy metals, oil or other quantified pollutants in our stormwater entering the Rio Grande, thus demonstrating the effectiveness of the currently installed BMPs and our current SWMP.

As stated in the responses to Orders C, D, and E the COA has made regular updates to EPA regarding changes in SWMP components. Additional changes have also been included in the Annual Reports per permit requirements. However, the COA acknowledges that it failed to inform the EPA of the changes that occurred with the State Legislative creation of the Water Utility Authority and the subsequent dissolution of the Water & Sewer Division of the COA Public Works Department. That will be corrected in a proposed SWMP amendment.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael J. Riordan', with a long horizontal flourish extending to the right.

Michael J. Riordan, P.E., Director  
Department of Municipal Development

cc: Robert J. Perry, CAO  
Gregory P. Smith, Deputy Director, DMD  
Melissa Lozoya, P.E., Engineering Division Manager, DMD  
Roland Penttila, P.E., Stormwater Management Section, DMD  
Jerry Lovato, Executive Engineer, AMAFCA  
Vern Hershberger, UNM  
Timothy Trujillo, NMDOT